

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 **Claim 1 (currently amended):** A method for producing a
2 semi-conducting device comprising at least a first layer
3 doped with a doping agent and a second layer ~~of another~~
4 ~~type~~ deposited on said first doped layer in a single
5 reaction chamber, wherein the deposition steps of said
6 first and second layers are separated by an operation for
7 avoiding the contamination of said second layer by the
8 doping agent ~~of said another layer~~.

1 **Claim 2 (original):** The method of claim 1, wherein
2 said operation comprises a dosing of the reaction chamber
3 with a compound able to react with the doping agent.

1 **Claim 3 (original):** The method of any of claims 1 and
2 2, wherein said operation comprises a dosing of the
3 reaction chamber with a vapour or gas comprising water,
4 methanol, isopropanol or another alcohol.

1 **Claim 4 (original):** The method of claims 1 and 2,
2 wherein said operation comprises a dosing of the reaction
3 chamber with a vapour or gas comprising ammonia, hydrazine

4 or volatile organic amine.

1 Claim 5 (currently amended): The method of ~~any of~~
2 ~~claims~~ claim 3 ~~and 4~~, wherein said dosing is performed at
3 around 0.05 to 100 mbar and between 100 and 350°C for less
4 than 10 minutes.

1 Claim 6 (currently amended): The method of ~~claims~~
2 claim 1 ~~to 6~~, wherein the doped layer is a p-doped layer.

1 Claim 7 (currently amended): The method of ~~claims~~
2 claim 1 ~~to 6~~, wherein the doped layer is a n-doped layer.

1 Claim 8 (original): The method of claim 6, wherein
2 said operation is followed by the deposition of a buffer
3 layer on the p-layer.

1 Claim 9 (currently amended): The method of ~~any of~~
2 ~~claims~~ claim 2 ~~to 8~~, wherein said dosing is followed by a
3 pumping at high vacuum and between 100 and 350°C for less
4 than 5 minutes.

Claims 10-13 (canceled)

1 Claim 14 (new): The method of claim 1, wherein said

2 doping agent on the surface of a substrate is transformed
3 into stable chemical compounds.

1 **Claim 15 (new):** The method of claim 4, wherein said
2 dosing is performed at around 0.05 to 100 mbar and between
3 100 and 350°C for less than 10 minutes.